

Applicant : Shutsung Liao et al.
Serial No. : 10/705,398
Filed : November 10, 2003
Page : 2 of 12

Attorney's Docket No.: 10634-002002 / UCHI 751
Cont.

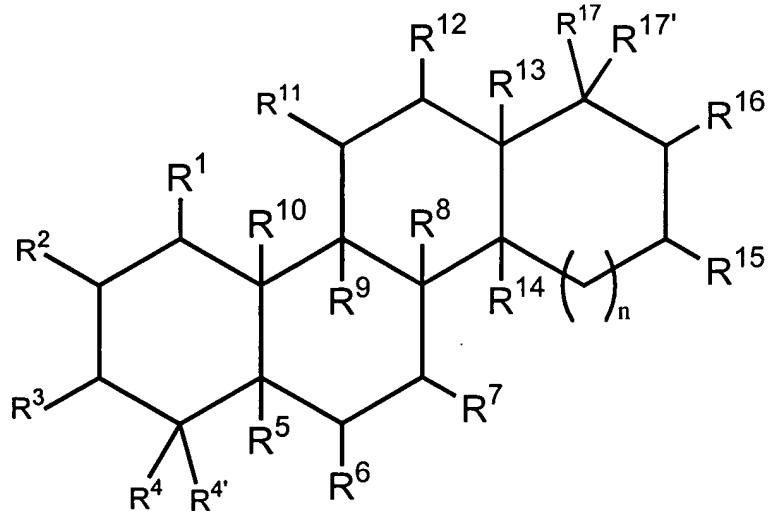
Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1 – 17. (Canceled)

18. (Currently Amended) A compound of the following formula:



wherein

each of R^1 , R^2 , R^3 , R^4 , R^4' , R^6 , R^7 , R^{11} , R^{12} , R^{15} , R^{16} , and R^{17} , independently, is hydrogen, hydroxy, amino, carboxyl, oxo, halo, sulfonic acid, -O-sulfonic acid, or alkyl that is optionally inserted with -NH-, -N(alkyl)-, -O-, -S-, -SO-, -SO₂-, -O-SO₂-, -SO₂-O-, -O-SO₃-, -SO₃-O-, -CO-, -CO-O-, -O-CO-, -CO-NH-, -CO-N(alkyl)-, -NH-CO-, or -N(alkyl)-CO-, and further optionally substituted with hydroxy, halo, amino, carboxyl, sulfonic acid, or -O-sulfonic acid;

each of R^5 , R^8 , R^9 , R^{10} , R^{13} , and R^{14} , independently, is hydrogen, alkyl, haloalkyl, hydroxyalkyl, alkoxy, hydroxy, or amino;

R^{17} is $-X-Y-Z$, in which X is unsubstituted alkyl or alkenyl; Y is a bond; and Z is alkyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, aralkyl, or heteroaralkyl, and is substituted with alkylsulfinyl, alkylsulfonyl, carboxyl or alkyloxycarbonyl; or Z is alkenyl ~~and is optionally~~ substituted with hydroxy, alkoxy, amino, halo, sulfonic acid, ~~carboxyl~~, ~~carboxy~~, oxo, alkyloxycarbonyl, alkylcarbonyloxy, alkylaminocarbonyl, alkylcarbonylamino, alkylcarbonyl, alkylsulfinyl, alkylsulfonyl, or alkylthio; and

n is 0;

provided that when Z is substituted with ~~carboxyl~~ or alkyloxycarbonyl, either X or Z contains at least one double bond;
or a salt thereof.

19. (Cancelled)

20. (Original) The compound of claim 18, wherein each of R^3 and R^6 , independently, is hydroxy, amino, carboxyl, halo, sulfonic acid, $-O$ -sulfonic acid, or alkyl, and is in the α -configuration.

21. (Original) The compound of claim 18, wherein R^5 is hydrogen and is in the β -configuration.

22. (Original) The compound of claim 18, wherein each of R^1 , R^2 , R^3 , R^4 , $R^{4'}$, R^6 , R^7 , R^{11} , R^{12} , R^{15} , R^{16} , and R^{17} , independently, is hydrogen, hydroxy, oxo, halo, sulfonic acid, $-O$ -sulfonic acid, or alkyl.

23. (Withdrawn) The compound of claim 22, wherein each of R^1 , R^2 , R^3 , R^4 , $R^{4'}$, R^6 , R^7 , R^{11} , R^{12} , R^{15} , R^{16} , and $R^{17'}$, independently, is hydrogen, hydroxy, or oxo; and each of R^5 , R^8 , R^9 , R^{10} , R^{13} , and R^{14} , independently, is hydrogen or hydroxy.

24 – 28. (Canceled)

29. (Currently Amended) The compound of claim 18, wherein Z is alkyl, aryl, heteroaryl, aralkyl, or heteroaralkyl, and is substituted with carboxyl, alkylsulfinyl, or alkylsulfonyl; or Z is alkenyl, ~~and is optionally~~ substituted with hydroxy, alkoxy, halo, sulfonic acid, ~~carboxyl~~, -O-sulfonic acid, alkylsulfinyl, or alkylsulfonyl.

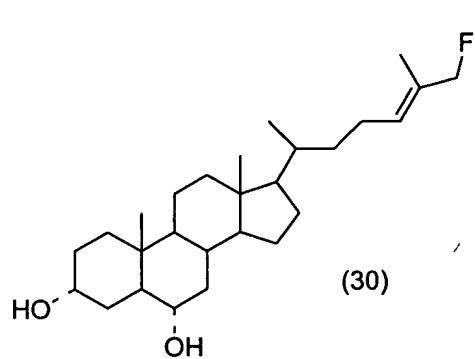
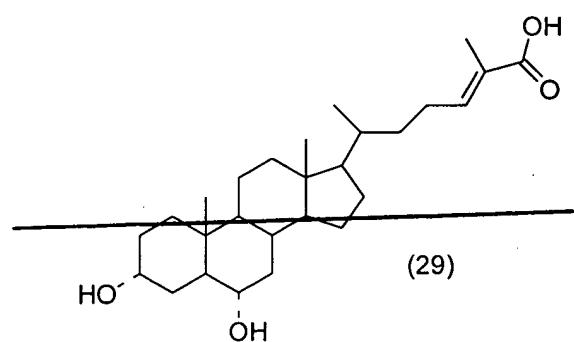
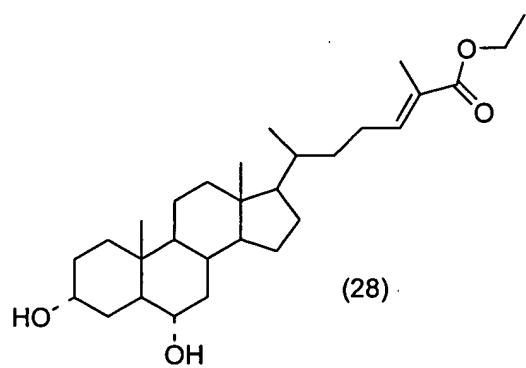
30. (Cancelled)

31. (Original) The compound of claim 18, wherein R^{17} contains a straight chain having 6-20 chain atoms.

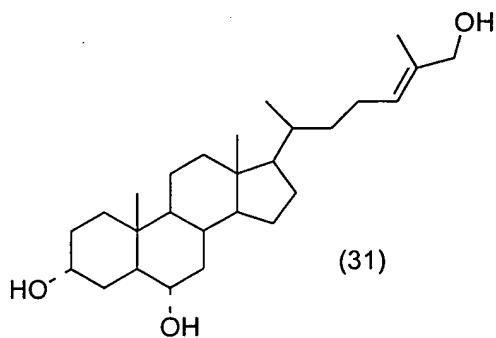
32. (Original) The compound of claim 31, wherein R^{17} contains a straight chain having 8-16 chain atoms.

33. (Withdrawn) The compound of claim 18, wherein X is $-CH(CH_3)-CH_2-$, Y is a bond, and Z is $-CH_2-CH=C(R')(CH_3)$ with R' being hydroxy, alkoxy, amino, halo, sulfonic acid, -O-sulfonic acid, ~~carboxyl~~, oxo, alkyloxycarbonyl, alkylcarbonyloxy, alkylaminocarbonyl, alkylcarbonylamino, alkylcarbonyl, alkylsulfinyl, alkylsulfonyl, or alkylthio.

34. (Currently Amended) The compound of claim 18, wherein said compound is:

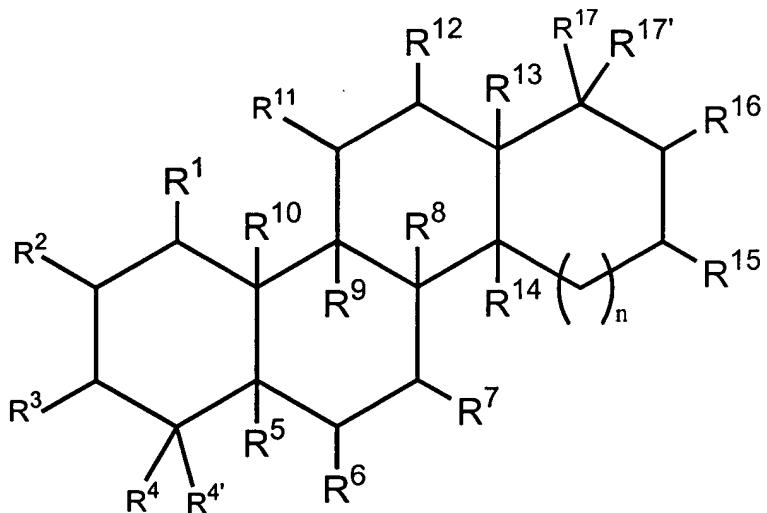


or



35 – 64. (Cancelled)

65. (Currently Amended) A pharmaceutical composition for treating a UR- or a LXR-mediated disorder, said composition comprising a pharmaceutically acceptable carrier and an effective amount of a compound of the following formula:



wherein

each of R¹, R², R³, R⁴, R^{4'}, R⁶, R⁷, R¹¹, R¹², R¹⁵, R¹⁶, and R^{17'}, independently, is hydrogen, hydroxy, amino, carboxyl, oxo, halo, sulfonic acid, -O-sulfonic acid, or alkyl that is optionally inserted with -NH-, -N(alkyl)-, -O-, -S-, -SO-, -SO₂-, -O-SO₂-, -SO₂-O-, -O-SO₃-, -SO₃-O-, -CO-, -CO-O-, -O-CO-, -CO-NH-, -CO-N(alkyl)-, -NH-CO-, or -N(alkyl)-CO-, and further optionally substituted with hydroxy, halo, amino, carboxyl, sulfonic acid, or -O-sulfonic acid;

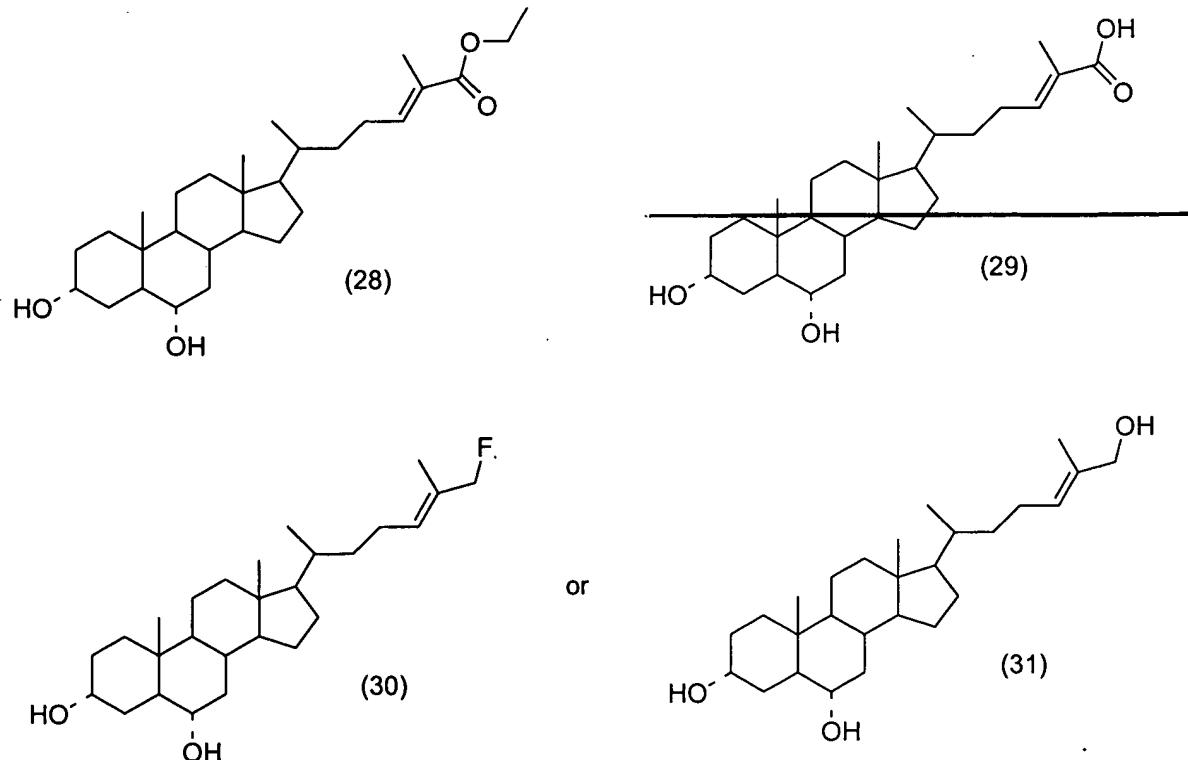
each of R⁵, R⁸, R⁹, R¹⁰, R¹³, and R¹⁴, independently, is hydrogen, alkyl, haloalkyl, hydroxyalkyl, alkoxy, hydroxy, or amino;

R^{17} is $-X-Y-Z$, in which X is unsubstituted alkyl or alkenyl; Y is a bond; and Z is alkyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, aralkyl, or heteroaralkyl, and is substituted with alkylsulfinyl, alkylsulfonyl, carboxyl or alkyloxycarbonyl; or Z is alkenyl and is optionally substituted with hydroxy, alkoxy, amino, halo, sulfonic acid, ~~-O-~~sulfonic acid, ~~carboxyl~~, oxo, alkyloxycarbonyl, alkylcarbonyloxy, alkylaminocarbonyl, alkylcarbonylamino, alkylcarbonyl, alkylsulfinyl, alkylsulfonyl, or alkylthio; and

n is 0;

provided that when Z is substituted with ~~carboxyl~~ or alkyloxycarbonyl, either X or Z contains at least one double bond;
or a salt thereof.

66. (Currently Amended) The composition of claim 65, wherein said compound is:



Applicant : Shutsung Liao et al.
Serial No. : 10/705,398
Filed : November 10, 2003
Page : 8 of 12

Attorney's Docket No.: 10634-002002 / UCHI 751
Cont.

67-68. (Cancelled)